

Preparation of Glass Working by Very Glass Beakers or Pots.
For two ounces of water into an old glass or tinning, and first add to two or three grains of phosphorus, the size of peas, and then fifty grains of nitrate of potash; then pour upon the same, by means of a long-necked vessel, reaching to the bottom of the glass, three immiscible parts of oil, so that the acid remains in contact with the phosphorus and nitrate of potash, fraction of an inch to half an inch, under the surface of the oil; when this mixture immediately after mix the mixture a few all lumps of phosphorus that, the bottom of the vessel will become elevated, and an upward green colored stream of fire pass through the oil—the nitrate of potash yields oxide of chlorine, by the action of phosphoric acid; whilst the phosphorus of the phosphorus phosphoric acid gas, which, following in the heated condition, gives the colored gas—Chemical Analysis.

Mining Record Office, No. 5, SHORTER'S COURT, LONDON, E.C. 4.
NOTICE.—The Mining Record Office, No. 5, Shorter's Court, London, E.C. 4, has been established for the purpose of receiving and recording all notices of claims for mineral rights, and for the purpose of publishing the same in the Mining Journal. The Office is open for business from 10 o'clock to 4 o'clock, on all days except Sundays and public holidays. The Office is situated in the Mining Record Office, No. 5, Shorter's Court, London, E.C. 4. The Office is open for business from 10 o'clock to 4 o'clock, on all days except Sundays and public holidays. The Office is situated in the Mining Record Office, No. 5, Shorter's Court, London, E.C. 4.

CORNISH MINING AND OTHER SHARES.
WILLIAM TRENDLEY has taken the PROPRIETORSHIP of all kinds of MINING PROPERTY, and has been appointed by the PROPRIETORS of the various MINING COMPANIES, to act as their AGENT in the sale of their SHARES. The general advantage of the sale of the SHARES of the various MINING COMPANIES, and the fact that the SHARES are sold at a discount of 10 per cent, are the reasons for the sale of the SHARES. The SHARES are sold at a discount of 10 per cent, and the sale is made by the PROPRIETORS of the various MINING COMPANIES, and the sale is made by the PROPRIETORS of the various MINING COMPANIES.

SEYSSSEL ASPHALT COMPANY, "CLARIDGE'S PATENT."
THIS ASPHALT is a superior material, obtained from an improved process, and is the best material for the construction of roads, and for the construction of the various MINING COMPANIES. The ASPHALT is obtained from an improved process, and is the best material for the construction of roads, and for the construction of the various MINING COMPANIES. The ASPHALT is obtained from an improved process, and is the best material for the construction of roads, and for the construction of the various MINING COMPANIES.

CHEAP AND DURABLE ROOFING.
BY MR. HADFIELD'S IMPROVED PATENT ASPHALT.
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TO ENGINEERS, ARCHITECTS, AND BUILDERS.
THE IMPROVED PATENT ASPHALT is a superior material, obtained from an improved process, and is the best material for the construction of roads, and for the construction of the various MINING COMPANIES. The ASPHALT is obtained from an improved process, and is the best material for the construction of roads, and for the construction of the various MINING COMPANIES.

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VICTORIA LIFE ASSURANCE COMPANY.
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GREAT BRITAIN MUTUAL LIFE ASSURANCE SOCIETY.
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RICHMOND AND WEST END JUNCTION RAILWAY.
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SOUTHAMPTON DOCKS.—Notice is hereby given, that the SOUTHAMPTON DOCKS, which are a superior docks, and are the best docks for the construction of roads, and for the construction of the various MINING COMPANIES. The DOCKS are a superior docks, and are the best docks for the construction of roads, and for the construction of the various MINING COMPANIES.

PATENT IMPROVEMENTS IN CHRONOMETERS.
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SOUTH METROPOLITAN PURE WATER COMPANY.
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Worcester and Cardiff Junction Railway.
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STEAM TO INDIA VIA EGYPT, MALTA, ITALY.
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MINING JOURNAL.
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PUBLIC COMPANIES.

MEETINGS.

MONDAY.—Northern Coal Mining Company, at Twelve—London Commercial Sale Rooms, at Twelve.
TUESDAY.—London and Dover Railway, at One—London and Greenwich Railway, at One—United General Gas Company, at One—South-Western Railway, at One—Life Assurance, at Two—Consolidated Traction Mining Company, at One.
WEDNESDAY.—Glasgow and Commercial Bank of Ireland, at Twelve—Dial Five
THURSDAY.—Agricultural and Commercial Bank of Ireland, at Twelve—Dial Five
FRIDAY.—Fremont and Wyo. Railway, at One.

CALLS.

London and Croydon Railway (new third share), 5s.
 DIVIDENDS.
 London and Westminster Bank, 5 per cent.—Glasgow and Ayr Railway, 14s. p. sh. Company, at Twelve—Grand Surrey Canal Company, at Twelve.

NOTICES TO CORRESPONDENTS.

The *MINING JOURNAL* is regularly published about Two o'clock on Saturday afternoon, at the office, No. 25, FLEET-STREET, where it can always be obtained and there is no charge for irregularity in its supply, in towns, other than those in the part of the paper through which it is ordered; but, in respect to its transmission to country subscribers, the blame is shared with the Post-office authorities.

* The *Mining Journal* of Saturday next, the 14th inst., in an Enlarged Sheet, will contain THREE IMPORTANT PAPERS—

1. IRELAND: Its Industrial Resources Considered, as presenting ample means of future Prosperity and Happiness.
2. CORNWALL: Its Geological Constitution, Metalliferous Deposits, and General Mining Prospects.
3. GERMANY: A faithful and comprehensive View of its Mineral Workings, with their probable Extension and Advantages.

On the important results dependent on the Formation of Railroads in Ireland, and a great variety of Miscellaneous Scientific Intelligence.
 The pamphlet on the Cornish and Somerset Railway will be noticed in our next; also the letters on the Great Southern and Western (Irish) Railway—Validation of Railway Companies from the charge of Sunday Prohibition, &c.

MINERS' ALMANACK.—It is proposed to publish an ALMANACK ANNUALLY—the first Number of which will appear on the 1st of November next, price 1s. In addition to the general information conveyed in publications of this nature, it is intended to furnish the names of the directors, officers, &c., in each mine, the returns, dividends, and statistical details, with also original articles and papers on mining engineering. Contributions, addressed to Mr. Henry English, 5, Shorter's-court, Throgmorton street, or to the office of the *Mining Journal*, Railway and Commercial Gazette, 25, Fleet-street, London, will meet with ready attention.

THE MINING JOURNAL, Railway and Commercial Gazette.

LONDON, SEPTEMBER 7, 1844.

* Parties desirous of ordering the *Mining Journal*, can do so, either direct to the office, 25, Fleet street, London, or through any newsreader or bookseller in town or country. Notices of irregularity in its delivery are requested to be forwarded to the office, where every endeavour will be made to rectify the cause of complaint.

Another appalling accident at a colliery in North Wales is briefly noticed in our columns of to-day, under the head of Mine Accidents, and, in drawing attention to the melancholy event, we have again to enforce on colliery and mine proprietors the duty imposed on them of preventing the recurrence of accidents of this nature, where the possibility presents itself. In the present case it would appear that the loss of life is, in a great measure, to be attributed to the want of caution on the part of the collier, and that the overman, or agent, had proceeded into the drift, or workings, with a safety lamp, to ascertain that no foul air existed, and, previous to his return, one of the men incautiously entered with a candle, which, being exposed to the action of the inflammable air, caused the explosion to take place.

If neither the Legislature nor the colliery owners will take this serious subject into consideration, it surely behoves the latter at least to provide for the widows and orphans of those whose lives are sacrificed. Why not, then, a fund be established for such purpose?—There can be no excuse why this is not done, except that it touches the pocket, and if we are to judge by the absence of feeling so generally manifested, we fear that an appeal to the purse will be attended with as little avail as in former cases.

We have during the past week had an opportunity of satisfying ourselves, from personal observation and inquiry, of the comparative merits of wire rope with hempen rope and chain, a subject to which we have directed attention in our late Numbers. It affords us much pleasure to state the result, as calculated at once to remove the doubts of those who are sceptical; while, by publicity being given, it will at once bring under the immediate notice of the agents and adventurers in mines the economy and safety of this material, whether considered in its first cost, its lasting properties, or the reduced weight or load upon the engine. The case before us is the result of thirteen months' experience at the Bog Mines, Shropshire, where wire rope has been employed, not only in the engine and other shafts, for winding ores, but also attached to tackle underground—its economy and lasting properties being thus confirmed by experience. The rope used in the engine-shaft is three and a half inches in circumference, weighing 11 lbs. 3 oz. to the fathom; the length of rope employed is 260 fathoms, consequently the entire weight is 23 cwt. 3 qrs. 31 lbs., which, if taken at 60s. per cwt., would make the amount 714. 15s. 3d. Compared with hempen rope or chain, the case will stand thus:—A 34-inch wire rope is considered equal to a 9-inch hempen rope, the weight of the latter being 19 lbs. 6 oz. per fathom, or for the entire length 3 tons 5 cwt., which, if taken at 50s. per cwt., would give 112s. 10s.—thus making a difference of 1 ton 3 cwt. in weight, and 40s. 14s. in the cost of the rope. If, again, we compare it with chain, the advantages of the one over the other become more apparent: chain of equal strength would be 44 lbs. 10s. 4d., which, at 45 lbs. per fathom, would give 5 tons 7 cwt. as the weight, which is an excess of 300 per cent.; if we take the price of chain at 7s. 7d. per lb., or 24s. per cwt., the amount will be 1244. 11s. 4d.—making a difference in favour of the wire rope of 531. 15s. in the first cost.

The comparative statement, then, will stand thus—

	Wires	Chain	Weight	Cost
Wire Rope	34 inch	34 inch	23 cwt. 3 qrs. 31 lbs.	714. 15s. 3d.
Hempen Rope	9 inch	9 inch	3 tons 5 cwt.	112s. 10s.
Chain	34 inch	34 inch	5 tons 7 cwt.	1244. 11s. 4d.

The size of the drum over which this rope works is 5 ft. 6 in., and the pulley at shaft-head four feet; there are also on the mine two other ropes, 350 yards in length, the size varying from three to three and a half inches; as regards that employed to the tackle underground, the size is from one and a half to two inches, working over a diameter of from seven to nine inches—in addition to those on the Pomeroy Mines, which belong to the same adventurers.

We have it on the authority of the mining captain, engineer, and other agents, that since the rope was first put to work, thirteen months ago, no accident has taken place, or breakage occurred, and it is to all appearance as safe at the present moment as on its first application; in consequence of a hitch in the rope in the course of working, it was deemed prudent to splice it at one point, which is the only difference the rope presents. The agents speak of it with the highest praise as to its safety, while its economy must be apparent from the data already given, as affords the first cost; but it would not be meeting our full justice to the advantages which the wire rope presents were we to stop here. We have already observed, that this rope has been in active working for thirteen months, the twenty-four hours round without interruption, excepting twelve hours in the week, when the raising of ore is suspended; thus, it has been continuously running for 3736 hours, with every probability of continuing for a further like period. As a matter of curiosity we have made the following estimate of its work.—The rope has travelled 3736 hours, at the rate of 1200 yards in the hour, or in the whole 448,320 yards, being upwards of 16,440 miles—having in the course of that time raised 444,320 cwt.

STEAM-ENGINE REPORTING.

At a former meeting of the Miners' Society, one of the resolutions passed was—"That a committee be appointed to inquire what defects may exist in the present method of reporting the duty on steam-engines, and to suggest any plan for its improvement," and at the late meeting of the society the subject was again brought forward, when it appeared that the committee had commenced, by sending a circular to all those mines which did not report, to which they had received but two replies, one stating the intention to report; the other the opinion that there was no utility in it. The circular commenced with the inquiry whether, in the event of a person in conjunction with Messrs. Loe being appointed to report the duties of the engines, the adventurers would be willing to have their engines reported?—and then proceeded to enumerate a variety of alterations in the mode of taking the duty at present in use, and which it was considered by the committee would insure more correct returns. They recommended that in all cases a counter should be provided, which will register the velocity of the piston at every part of the stroke, and the exact space traversed in any given period, instead of that now in use for merely registering the number of strokes, that the quantity of coals consumed should be reckoned by a barrow holding a given quantity at strike measure, such barrow to be stamped or marked by the reporter, and weighed every month by him, and that the weight of such barrowful be deemed the average of the whole number consumed in the month. That one of the reporters, or some competent person, should go underground to examine the pit-work occasionally, and in addition to the usual information, that there should be a column showing the number of horse-power exerted by each engine, and also the column of remarks should particularly describe the circumstances of the several lifts, different angles of the underlie of the rods, &c. After the reading of this circular, it was suggested, as only two answers had been received, whether it would not be better to defer the further consideration of the subject to the next meeting, when more replies would perhaps be received, and as this circular was sent only to those who did not report, whether it would not be advisable to ascertain if the adventurers in those mines which did report would consent to these alterations. It appeared there were fifty-seven engines now reported, and forty mines which did not report at all, making, perhaps, about the same number of engines left out as those which did report; and, as to the expense, it was agreed that the greater the number, the less in proportion would be the expense. From observations made by Captain Francis, it would appear that the present method is anything but uniform; some mines weigh their coals, in others they are measured, but the measurement takes place in so many ways that few can give like results; if the barrow, as recommended in the circular, were adopted, the results of all the mines would be uniform. It was also proposed that a particular account of the boilers of each engine should be given—size, shape, &c. Mr. Taylor, in moving the resolution on the question, observed that he did not consider this subject one of mere curiosity, as it had been the means of great improvements in the county. One reason why these reports should be accurately given was that persons out of the county, and engaged in similar occupations with themselves, as well as those who devoted their attention to the improvements of the steam-engine, should be properly informed of those principles on which that improvement depended. Although the duty papers might not be quite true, still they had sufficient correctness to show that their engines did perform that amount of work with a given quantity of fuel of which they boasted. He thought the system recommended by the committee would go far to improve, and render more correct the returns; he then moved:—"That it appears to this meeting that the suggestions of the committee embodied in the circular, which it forwarded to different mines on the 11th of June last, are calculated to show the duty performed by the different engines much more correctly than the present engine report gives it, and that the committee be requested to communicate with the mines now having their engines reported, as well as those which have not been reported, with a view to procuring the adoption of the system of reporting which they have proposed." The subject was again introduced in the after part of the day, when Mr. Williams strongly urged that no further delay should take place, but rather that the committee should be divided into sub-committees, so as quickly to canvass all the mines. It appeared, however, the general opinion that it would be better for the chairman of the committee to communicate with each, and that immediately, to ascertain how far they could depend on a uniform system. Captain Loe entirely approved of the suggestions of the committee, and himself and brother would exert themselves to carry them out effectually.

ON THE DECOMPOSITION OF MINERAL LODES.

BY MR. JOHN A. PHILLIPS, F.R.S.E.

The author says:—In speaking of this subject, I shall principally confine myself to my own observations in those mines in which I have tried the electric currents of the Indes, and to those changes which may be supposed to be continually taking place. Among these may, I conceive, be ranked the formation of native malleable copper, through the decomposition of the various ores of that metal—for it is a well known fact, that malleable metal is generally found associated either with grey or pulverent black ore, and that wherever grey or black ore exists, the water in, or it is practically called, "rock" (i. e., impregnated with sulphate of copper)—and, as these appearances are invariably found together, it may fairly be presumed that they have some connection, and that one may be the cause of the other. Now, the grey and black ore are almost invariably found nearer the surface than either the malleable metal or copper pyrites (except that the malleable is sometimes found mixed with the two former); therefore all the water which may percolate through the lode from the surface, must first pass through the friable black and easily soluble grey ore. And as rain water is rich in oxygen, mechanically combined, this would be imparted to the sulphate, which being thereby converted partially into the sulphate, would be carried off in solution; and should the metal, by means of an electric current or otherwise, be precipitated, it would fill the fissures of the subjacent rock. When these appearances are met with at very considerable depths, and below the level of the sea, so that the surface water cannot be let off through the medium of springs at a lower level; the thermo-circulation spoken of by Mr. R. W. Fox will come into action. For the cold and oxygenated rain water will descend, and in so doing, impart oxygen to the ore of copper, as in the former instance; while the hot descending water will ascend to the surface, and absorb a portion of oxygen, and, being cooled will again be prepared to produce the same effect in its descent. These chemical changes are alone sufficient to produce electric currents of considerable intensity, as may be proved by inserting a piece of copper pyrites, and another of grey ore in a little of the rock water from a copper lode, and connecting them by means of wires with a galvanometer; when the grey ore will be found to be positive in relation to the yellow, and when large masses are connected they will, of course, give rise to stronger currents. The author then goes on to show the probable source of the first portion of grey ore, which he supposes to have once existed in the state of copper pyrites, and from whence stated in the paper to have become decomposed. In favour of the supposition, that native malleable copper is continually in progress of formation, he adduces the fact, that some men at Crinoid Mine, when removing a heap of work containing copper ore, which had lain in the same place several years, found a considerable quantity of native malleable metal between it and the ground on which it stood; deposited, he presumes, by galvanic action, set up between the pile and the earth. Some of his experiments seem to make this supposition very probable. The latter part of the paper went to show, that various other minerals are still being formed, particularly iron pyrites. Some old iron which had been buried under a heap of slanders and small coal, for about twenty years at Polgoth Mine, was found to be externally converted into iron pyrites, which exposure to the air rapidly changed into peroxide. The sulphur in this case must have been supplied by the coal, and so the iron, at the time of its being thrown in a heap, was probably rusty; it does not appear improbable, that it imparted its oxygen to the carbon, forming carbonic oxide, or carbonic acid gas, while the sulphur united with the iron to form the pyrites. In some cases the pyrites was itself oxidized and converted into the sulphate. The paper was accompanied by numerous specimens, illustrating the views of the author, and among them was a stone of clear transparent quartz, which would lead to the supposition, that these rocks which we are in the habit of considering as primary, are not always so in reality. This specimen came from Polgoth Mine, where an almost constant increase throughout its whole explored length, 100 fathoms, by a vein of granite.—Transactions of the Royal Cornwall Polytechnic Society.

TRIAL OF THE NEW LOCOMOTIVE BY COMPRESSOR.

In last week's *Mining Journal* we drew attention to M. Andraud's locomotive power, and now offer to our readers a translation of a document from the *Journal des Chemins de Fer* on the recent trial of that machine.—"During this week we have commenced on the left bank of this railway (Versailles) an experiment of the highest importance—it was to test the problem whether compressed air can be a substitute for steam on railways, as proposed by M. Andraud. This engineer has been more than five years occupied with this grave question, and has at last finished a compressed air machine of large dimensions, which was proved on Monday last for the first time on the Versailles line, but merely to test the question whether the mechanism would perform regularly. The experiment succeeded very well; the locomotive was mounted on six wheels, and weighs from 4500 to 5000 kilogrammes. It neither wants the aid of a tender, coals, nor water; its mechanism is of the greatest simplicity, and its appearance rather elegant; its recipient for the motive power is of iron, and contains 3300 litres. It could resist more than 100 atmospheres, but it ought not to be charged with more than twenty-five, at which pressure its weight is increased by 107 kilogrammes of air, and its working power is about that of nine horses an hour. We will explain why the first trials with this machine took place only with a weak tension of air. The directors had placed at the disposal of M. Andraud a steam locomotive, not in use, to compress the air; recently, this locomotive had been sold, so that the experimenter was obliged to work his pumps by manual labour, which force was hardly sufficient to obtain, with such a large apparatus, a pressure of more than from four to five atmospheres. In spite of this, the compressed air machine has got through its first ordeal with great success; it moved easily, and soon acquired a speed of from eighteen to twenty miles an hour. Messrs. Baudet and Bivens assisted at this first trial on the part of the Government, and had the courage to seat themselves on the machine with the inventor, who directed its progress. The extent run over was not more than 1 kilometre, but the object was merely to test if the machine would work with ease and regularity. Its working capabilities remain to be tested, which will be done in the ulterior experiments, when the apparatus for the compression shall have been worked by a sufficient power. For this, M. Andraud proposes to ask the directors to allow the construction of an experimental windmill, to prove what he has established—viz., that the inexhaustible and gratuitous force of the wind, like that of the water, can in some way be changed into compressed air, and in this form be stored up, again to be employed in case of need for the traction of the carriages on railways. This is, indeed, a question of the first consideration, and if the problem is not yet solved, it will soon be effected. We cannot here overlook the unwearied diligence and courage of the inventor, M. Andraud; his first success convinced many who were incredulous, and they no longer doubt the truth that this air locomotive can travel; it now only remains to be decided on what conditions as to economy and practice it can be employed."

IMPROVED CHAINS FOR MINING AND OTHER PURPOSES.

(Abstract of Specification of Patent granted to J. and R. Haines, of Tipton Staffordshire, Commissioners, for an improved method or method of making or manufacturing links for the construction of flat chains used for mining and other purposes.)—*Chief Engineer.*

This invention, for improvements in the construction of flat chains for mining and other purposes, relates not only to the mode of manufacturing of flat chains for the purposes above described, but also to the peculiar form or configuration thereof. The links of these chains, which are made from flat bar-iron in the manner hereafter described, are 4½ in. extreme length, one inch wide, and half an inch thick in the middle, which part is of an oval form—the bosses at each end through which the pins pass being five eighths of an inch thick, and somewhat elongated, the object of which is, to maintain the strength of the link, as the holes through which the pins pass wear by the continued action of the same in the direction of the length of each link, or the chain. We mention the size of the links in consequence of the inventor laying claim to the construction of flat chains, of the proportions shown in the drawings of the patent, which may either be increased or diminished, according to the strength of chain required. The flat chain, as shown, consists of three of such links in breadth to form one length or compound link, the adjoining link consisting of two such links placed between the three, and at each side there are two links with flat sides, or half links, which together are equal to one of the links above described; the links thus arranged are fixed together by a pin or bolt 5-16ths of an inch diameter, which is passed through them and then riveted, so as to keep the whole firmly together.

That part of the invention which relates to improvements in the manufacture of flat chains, consists in making the links as above described, by rolling flat bar-iron in a heated state between rollers having grooves in their periphery, of the exact form of the links intended to be made, which grooves, at intervals in the roller, are enlarged, so as to form the enlarged part of the links at each end thereof; the links, after being rolled, are placed between two dies or moulds, and subjected to pressure, which makes the links all of one size. The inventor claims the method or methods of manufacturing links for the construction of flat chains for mining and other purposes—the essential character of such improved method being, that the links are all of the same size, and of the form and proportions shown in the drawings of the patent, the same being prepared by rolling bars of heated iron between rollers having grooves in their surface of the form of the links, and also the enlargement or cavities in the aforesaid grooves for forming the ends or enlarged part of the links, together with pressing the links, after they have been cut from the bars, between dies or moulds, whilst they are in a heated state.

NEW METHOD OF CLEANSING WOVEN WIRE FABRICS,

MORE PARTICULARLY APPLICABLE TO SAFETY LAMPS.

It is well known that the metallic cloth which surrounds the flame of the lamps used in coal mines becomes very foul, in consequence of a mixture of oil, soot, and coal dust accumulating itself between the meshes thereof; and as this clogging up of the meshes of the fabric causes a great diminution in the intensity of the light, it is found necessary to cleanse the same very frequently. For this purpose, the metallic cloth is exposed to the action of fire, which disengages the oil and soot, and only leaves between the meshes a powder, which is easily removed by means of a dry brush. It is, however, impossible to heat metallic cloth to the degree required for disengaging the oil and soot, without bringing the same in contact with the air; by which means, in consequence of the oxidation of the iron, the wire is diminished in thickness, and the strength of the fabric consequently impaired. Moreover, when the coal is of a sulphureous nature (as is often the case), the sulphur combined therewith, being very destructive to iron, always renders the wire more liable to break. The consequence of this is, that the safety-lamp, becoming thinner and more fragile, is much more likely to break from a shock, or even by the action of the flame; and, thus the probability of accidents, which are of such frequent occurrence in mines, is greatly increased. The following method of cleansing these kinds of fabric entirely obviates the above-mentioned inconveniences.—Take a given quantity of carbonate of soda of commerce (which may be procured at a very low price), and dissolve it in water in a cast-iron vessel. To this solution it is to be added a sufficient quantity of quick-lime, to decompose the carbonate of soda of the carbonate acid contained therein. The quantity of lime may be easily calculated by means of a table of chemical formulae. By sufficient boiling, a perfect re-action is produced; the carbonic acid combines with the lime, and forms an insoluble carbonate, and the soda becomes caustic. It is only necessary to separate the carbonate of lime from the caustic soda by filtration. In this solution of caustic soda, which is diluted more or less, according to circumstances, the foul metallic fabric is to be immersed. After removing a short time (a few minutes will suffice) in this boiling liquid, the oil deposited in the meshes will be converted into soap, and the soot and coal be removed by being partially dissolved. When the meshes of the fabric are cleaned, it is to be treated with a hard bristled brush, which penetrates the fabric, and afterwards washed in clean water, which removes any sediment that might have adhered thereto; after which the metallic fabric is to be wiped inside and out with a sponge, made of a sponge wound upon a stick, and in order to prevent the formation of rust upon the fabric, it is exposed to the heat of a coke or other solid fuel, until perfectly dry. It will be seen that the method of cleansing above described is very simple, and founded upon a well-known chemical reaction, but it will be found to possess considerable advantages over the method now in use. In pointing out the advantages possessed by Mr. Monnier's lamp, M. Dorel, Chief Engineer

RAILWAYS IN IRELAND.

THE UNIVERSITY OF CHICAGO

COMMUNICATED THROUGH MINE.

4. Before another impression of the Many colored the organ, the next meeting of the association, in the United Mine will have had to take into consideration the state of their affairs. I, therefore, beg opportunity to address my fellow shareholders prior to their assembling next week. I would not think it improper well they will be able to do so next meeting. It is enough that so an answer will be sent by letter to the press, perhaps. There, I would advocate shareholders in obtaining a full detailed account of the expenditure of the last year, the reasons why this value has been reached. I mean, we even then, for the last part of the year, would be sufficient. The shareholders should also be, in addition to be present of the assumption of that amount, the price paid without need of the capital value has been reached? But we have reached the normal position of the shareholders, next, as the price, for the stock, is admitted to be a good one, I feel outside of them, if the price is better than that with which they are, it will not prosper. A time to consider...

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ENGLISH MINES.

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SALE OF COPPER ORES IN CORNWALL.
Sampled Aug. 31, and sold at Baring's Hotel, Poole, Sept. 5.

Miner.	Tons.	Price.	Purchaser.	Miner.	Tons.	Price.	Purchaser.
Combs	100	9 0	Freemant.	A. Basset	240	11 0	Freemant.
ditto	300	9 17 6	English Co.	ditto	240	11 0	Williams.
ditto	300	9 17 6	F. Gordon	ditto	240	4 10	English Co.
ditto	112	9 0	Havill & Co.	ditto	240	4 10	Havill & Co.
ditto	300	9 0	Williams.	ditto	1	10 0	Williams.
ditto	30	4 0	English Co.	S. Bucker	60	3 0	English Co.
ditto	28	1 0	Williams.	W. Chapp	60	9 0	English Co.

ditto	23	4	8	6	Misses Royal	ditto	66	6	19	6	F. Green
ditto	104	4	15	6	Williams	ditto	71	6	6	Williams	
ditto	273	4	6	6	P. Green	ditto	63	9	2	F. Green	
ditto	16	4	6	6	Neill & Co.	ditto	39	2	12	Virgins	
H. B. B. 103	6	7	6	6	Misses Royal	ditto	36	9	5	6	
ditto	66	7	17	6	Williams	Fewer C.	105	3	5	6	
ditto	37	3	4	6	English Co.	ditto	105	3	5	6	
ditto	37	3	4	6	Freeman	ditto	73	3	19	6	
ditto	74	4	6	6	Williams	ditto	47	7	14	6	
ditto	23	4	15	6	Williams	Wh. Jewell	109	3	9	6	
ditto	72	4	15	6	Misses Royal	ditto	14	5	3	6	
ditto	71	3	3	6	P. Green	ditto	33	5	3	6	
ditto	79	3	10	6	Williams	ditto	39	3	12	6	
ditto	49	4	18	6	Misses Royal	East Ford	35	3	6	Williams	
ditto	34	6	0	6	Crown Co.	ditto	30	9	18	6	
ditto	34	6	0	6	Williams	Freemans	48	4	6	6	
R. C. 109	4	18	6	6	Williams	ditto	38	5	12	6	
ditto	34	5	6	6	Williams	ditto	39	5	12	6	
ditto	35	5	6	6	Williams	ditto	79	4	17	6	
ditto	35	5	6	6	Misses Royal	Treball	79	4	17	6	
Longwood	10	3	10	6	English Co.	W. C. 105	5	7	10	6	
ditto	8	3	13	6	Williams	W. C. 105	5	7	10	6	
ditto	104	4	15	6	Williams	ditto	37	3	14	6	
ditto	94	4	6	6	Virgins	ditto	43	9	19	6	
ditto	82	3	3	6	Freemans	ditto	39	3	12	6	
W. B. 123	4	6	6	6	English Co.	Wh. Harriet	39	4	19	6	
ditto	97	4	6	6	P. Green	ditto	14	4	5	6	
ditto	4	4	6	6	Williams	ditto	14	4	5	6	
S. B. 120	4	11	6	6	Williams	Marine	14	1	19	6	
ditto	34	4	6	6	English Co.	C. Chamber	7	4	4	6	

[illegible]

Average standard, 1925. lbs.—Average production, 40—Average price, 12. 1/2c.		
—Quantity of ore, 44,610 tons.—Quantity of iron shipped, 336 tons 14 cwt.—Average		
of money, 24,300. lbs. 5d.—Average standard of last year, 104. 1/2 lbs.—Average		
production, 74.		
COMPANIES BY WHOM THE ORES WERE PURCHASED.		
	Tons.	Amount.
Misses Royal Company	1014	\$1400 18 3
English Copper Company	870	\$1100 18 0
Wolven and Sons	300 1/2	\$360 0 0
Brown and Co.	280	\$377 0 0
Graveland and Sons	212 1/2	\$265 17 0
Crown Copper Company	34	\$42 18 3
Bliss, Williams, Nevill, Bruce, and Co.	618 1/2	\$760 0 9
Williams, Foster, and Co.	118 1/2	

[illegible]

SALE OF BLACK TIN.
At Pease's Hotel, Ypsilanti, 1st September.

Wines.	E. C.	Price.	Amount.	Purchasers.
W. & A. D. French.	5 100	45 10 0	50 10 0	Bullfinch & Williams.
W. & A. D. French.	5 100	45 10 0	50 10 0	Bullfinch & Williams.
W. & A. D. French.	5 100	45 10 0	50 10 0	Bullfinch & Williams.
W. & A. D. French.	5 100	45 10 0	50 10 0	Bullfinch & Williams.

Total, 1 ton 142 cwt. Amount of money, £450 10s. 0d.

R.H. OF COPPER ORES AT SWANSEA

Copper ore for sale September 1:—Cuba 40-75-67-62-60-58-54-51-48-45-42-40-38-35-32-30-28-25-22-20-18-15-12-10-8-6-4-2-1-0-1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-

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REPORT OF REVENUE TO INDIA FROM LONDON AND GUYANA		Month	Year	Quarter
Revenue	1,250,000	1,250,000	1,250,000	1,250,000
Expenses	1,250,000	1,250,000	1,250,000	1,250,000
Balance	0	0	0	0
Revenue	1,250,000	1,250,000	1,250,000	1,250,000
Expenses	1,250,000	1,250,000	1,250,000	1,250,000
Balance	0	0	0	0

[illegible]

EXPLOYMENT OF THE PRECIOUS METALS.—The following are the official returns of the exports of gold and silver from the port of London for the week ending Saturday last:

Gold sent to Manchester.....	1,400 ounces.
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100 Treasury	60	110	45.174	United Mission	594
100 Voluntary					

Line.	Length miles.	Present an- nual coal.	Fig. on V.I.M. share.	Share.	Last week's return.
Aberdeen and Perth Railway	15	4,126,150	58	107	4,125 10 7
Birmingham and Gloucester	15	1,441,000	110	55	1,440 11 5
Cardiff and Merthyr	15	244,715	54	54	244 50 0

1	Colorado and Connecticut	1,131	5,205,154	1,550	21,791	1,950	9 10
2	Ill. Penn. and Maryland	1,031	4,800,000	1,400	1,900	1,950	9 10
3	Connecticut and Maryland	910	4,200,000	1,300	1,900	1,950	9 10
4	Connecticut and Maryland	810	4,200,000	1,300	1,900	1,950	9 10
5	Connecticut and Maryland	810	4,200,000	1,300	1,900	1,950	9 10
6	Connecticut and Maryland	810	4,200,000	1,300	1,900	1,950	9 10
7	Connecticut and Maryland	810	4,200,000	1,300	1,900	1,950	9 10
8	Connecticut and Maryland	810	4,200,000	1,300	1,900	1,950	9 10
9	Connecticut and Maryland	810	4,200,000	1,300	1,900	1,950	9 10
10	Connecticut and Maryland	810	4,200,000	1,300	1,900	1,950	9 10
11	Connecticut and Maryland	810	4,200,000	1,300	1,900	1,950	9 10
12	Connecticut and Maryland	810	4,200,000	1,300	1,900	1,950	9 10
13	Connecticut and Maryland	810	4,200,000	1,300	1,900	1,950	9 10

1	1,000,000	100	100	100	100
2	1,000,000	100	100	100	100
3	1,000,000	100	100	100	100
4	1,000,000	100	100	100	100
5	1,000,000	100	100	100	100
6	1,000,000	100	100	100	100
7	1,000,000	100	100	100	100
8	1,000,000	100	100	100	100
9	1,000,000	100	100	100	100
10	1,000,000	100	100	100	100
11	1,000,000	100	100	100	100
12	1,000,000	100	100	100	100
13	1,000,000	100	100	100	100
14	1,000,000	100	100	100	100
15	1,000,000	100	100	100	100
16	1,000,000	100	100	100	100
17	1,000,000	100	100	100	100
18	1,000,000	100	100	100	100
19	1,000,000	100	100	100	100
20	1,000,000	100	100	100	100
21	1,000,000	100	100	100	100
22	1,000,000	100	100	100	100
23	1,000,000	100	100	100	100
24	1,000,000	100	100	100	100
25	1,000,000	100	100	100	100
26	1,000,000	100	100	100	100
27	1,000,000	100	100	100	100
28	1,000,000	100	100	100	100
29	1,000,000	100	100	100	100
30	1,000,000	100	100	100	100
31	1,000,000	100	100	100	100
32	1,000,000	100	100	100	100
33	1,000,000	100	100	100	100
34	1,000,000	100	100	100	100
35	1,000,000	100	100	100	100
36	1,000,000	100	100	100	100
37	1,000,000	100	100	100	100
38	1,000,000	100	100	100	100
39	1,000,000	100	100	100	100
40	1,000,000	100	100	100	100
41	1,000,000	100	100	100	100
42	1,000,000	100	100	100	100
43	1,000,000	100	100	100	100
44	1,000,000	100	100	100	100
45	1,000,000	100	100	100	100
46	1,000,000	100	100	100	100
47	1,000,000	100	100	100	100
48	1,000,000	100	100	100	100
49	1,000,000	100	100	100	100
50	1,000,000	100	100	100	100
51	1,000,000	100	100	100	100
52	1,000,000	100	100	100	100
53	1,000,000	100	100	100	100
54	1,000,000	100	100	100	100
55	1,000,000	100	100	100	100
56	1,000,000	100	100	100	100
57	1,000,000	100	100	100	100
58	1,000,000	100	100	100	100
59	1,000,000	100	100	100	100
60	1,000,000	100	100	100	100
61	1,000,000	100	100	100	100
62	1,000,000	100	100	100	100
63					

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